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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,290	03/21/2001	Michael F. Culbert	APL1P211/P2656	6108
22434	7590	02/23/2007		
BEYER WEAVER LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			EXAMINER CZEKAJ, DAVID J	
			ART UNIT	PAPER NUMBER
			2621	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
2 MONTHS		02/23/2007	PAPER	

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/816,290  
Filing Date: March 21, 2001  
Appellant(s): CULBERT, MICHAEL F.

**MAILED**

**FEB 23 2007**

**Technology Center 2600**

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Micheal Lee  
Reg. No. 31,846  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/15/06 appealing from the Office action mailed 7/14/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,802,361	Wang et al.	09-1998
6,671,323	Tahara et al.	12-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-4, 11-14, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tahara et al. (6671323), (hereinafter referred to as "Tahara").

Regarding claims 1, 11, and 19, Tahara discloses an apparatus that relates to an encoding and decoding system (Tahara: column 1, lines 6-9). This apparatus comprises "accessing the edit track to use data in the edit track during compressing" (Tahara: figures 1 and 4, column 11, lines 44-48, column 22, lines 19-34, wherein the edit track is the MPEG\_ES\_editing\_information, the compressing is the encoding) and "an edit track records editing steps made by a user, wherein the recorded editing steps are used for compressing the video data (Tahara: figures 10-16, 24-25, column 9, lines 49-54, column 12, lines 31-34, column 17, lines 58-61, wherein the history data and user data contain the recorded editing steps).

Regarding claims 2 and 12, Tahara discloses "using information in the edit track to determine the bit resolution for a region defined in the track" (Tahara: column 13, lines 52-67, wherein the horizontal\_size\_value, vertical\_size\_value, aspect\_ratio\_information, and bit\_rate\_value are used to determine the bit resolution for a region).

Regarding claims 3 and 13, Tahara discloses "using motion information in the edit track to create a motion vector" (Tahara: column 19, lines 4-26, wherein the motion information is the f\_code[0][1], f\_code[1][0], f\_code[1][1], and concealment\_motion\_vectors).

Regarding claims 4 and 14, Tahara discloses “using information in the edit track to create a difference vector” (Tahara: column 19, lines 4-26, wherein the motion vector is a difference vector between two frames).

Regarding claim 17, Tahara discloses “an edit track reader for accessing data within the edit track and generating instructions based on the data within the track” (Tahara: column 22, lines 19-34, column 23, lines 31-34, wherein the controller, variable length decoder, and variable length encoder access the data and the instructions are used to control the various circuits).

Regarding claims 18 and 20, Tahara discloses “the video compressor is an MPEG video compressor that provides compression with a single encoding” (Tahara: figure 1).

2. Claims 5-10 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (6671323), (hereinafter referred to as “Tahara”) in view of Wang et al. (5802361), (hereinafter referred to as “Wang”).

Regarding claims 5 and 15, note the examiners rejection for claim 1, and in addition, claims 5 and 15 differ from claim 1 in that claims 5 and 15 further require using information in the edit track to determine a number of I-frames used for compression. Wang teaches that searching video has proven to be difficult and time consuming (Wang: column 3, lines 29-30). To help alleviate this problem, Wang discloses “using information in the edit track to determine a number of I-frames used for compression” (Wang: figure 3, column 11, lines 19-29, wherein the number of I-frames is located in the scene change detection file.

Scene change sequences typically begin with an I frame. Therefore having an information file that contains scene changes would also contain the number of I-frames used). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Tahara and add the I-frame determination taught by Wang in order to obtain an apparatus that can easily search different video segments.

Regarding claims 6, 7, and 16, Wang discloses “creating a track of edited video data” (Wang: figure 5h, wherein it is shown that a user can change or edit the video data by adding a bookmark) and “creating at least one object in the edit track, wherein the edit object defines a region that has been edited and a type of edit” (Wang: column 16, lines 53-65, wherein the object is the rectangle, which defines the region within in the image, the type of edit is represented by the changing icon).

Regarding claim 8, Tahara discloses “using text information in the edit track to increase bit resolution of quantization of a pixel block to improve resolution of text provided by the text information” (Tahara: column 14, lines 8-19, wherein the text information are the quantization matrices which increase/decrease bit resolution. The examiner notes that the increase/decrease in the bit resolution will cause any subsequent video, text, or image data to increase/decrease in quality).

Regarding claim 9, Wang discloses “using blend information in the edit track to decrease the bit resolution of a pixel block” (Wang: figures 3 and 5d,

column 15, lines 53-65, wherein the user can change the red, green and blue color values yielding a blending technique to obtain the desired color.

Decreasing the color attributes would decrease the resolution of a pixel block).

Regarding claim 10, Wang discloses "the edit track defines a region within which a video edit has occurred and the type of edit that occurred within the region" (Wang: figures 3 and 9, wherein the frame difference, scene change, and segment determine the region and the color histogram and texture determine the type of edit).

#### **(10) Response to Argument**

- i. On pages 4-6, appellant argues that Tahara does not disclose using the user recorded editing steps for compressing the video.

Tahara illustrates in figure 4, an editing/processing studio for a user to perform editing steps. Tahara further discloses in column 14, lines 57-64 and column 22, lines 19-34, that the MPEG\_ES\_Editing\_information is in the user data area which includes a History\_data() function indicating a record of the editing steps made by the user in the past. Further, Tahara discloses in column 15, lines 27-37, that the V-phase and H-phase, which are part of the MPEG\_ES\_Editing\_information, indicate the first line to be encoded, or compressed, in a frame, thus indicating the MPEG\_ES\_Editing\_information, or edit track, is used for compressing the video data. Therefore the recorded editing steps are used for compressing the video data.

- ii. On page 8, appellant argues that Tahara fails to disclose using information in the edit track to determine the bit resolution of quantization for a region defined within the edit track.

Tahara discloses in column 13, lines 52-67, variables such as horizontal\_size\_value, vertical\_size\_value, aspect\_ratio\_information, and bit\_rate\_value, which when used, result in the calculation of the bit resolution for quantization. The claim does not recite the data has to come from an edit step made by a user. Therefore the bit resolution of quantization is determined using the above variables.

- iii. On page 8, appellant argues that Tahara fails to disclose using motion information in the edit track to create a motion vector.

Tahara discloses in column 19, lines 5-13, that f\_code[0][1], f\_code[1][0], and f\_code[1][1] define search ranges for forward and backward, vertical and horizontal motion vectors. The examiner notes that within the MPEG environment, search ranges are used to find/calculate the best candidate motion vector for a frame. Therefore the motion vectors are determined using information in the edit track.

- iv. On page 9, appellant argues that Wang fails to disclose determining the number of I-frames that will be used for compression.

Wang discloses in column 11, lines 19-29, calculating a scene change detection file. Scene changes typically being with an I frame. Therefore having an information file that contains scene changes would also contain the number of I frames used. Further, Wang illustrates in figure 2a, receiving input images which may or may not be



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compressed. Wang discloses in column 8, lines 15-19, that the images need only be compressed for storage purposes. If the application had enough storage, the video would not need to be compressed. For images which are not compressed, the scene change detection file would indicate the number of I-frames that will be used for compression. Therefore Wang discloses determining the number of I-frames that will be used for compression.

v. On page 10, appellant argues that Wang fails to disclose creating at least one edit object in the track, the object defining a region that has been edited and a type of edit.

Wang discloses in column 16, lines 52-65, creating a rectangular area via the shape of a rectangle or edit object. The area inside the rectangle defines the region within the image. The type of edit is represented by the changing icon. The image attribute of the visual icon is changed to represent the parameter modification, or type of edit. Therefore Wang discloses creating an object defining a region that has been edited and the type of edit.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

#### **(12) Evidence Appendix**

No evidence has been submitted by appellant.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Dave Czekaj



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